

## UK Interface Requirement 2005

**UK Radio Interface Requirement for Wideband Transmission Systems  
operating in the 2.4 GHz ISM Band and Using Wide Band Modulation  
Techniques**

**Publication Date:** November 2006  
**Date Amended:** January 2018  
**2015/1535/EU Notification number:** 2006/420/UK



# Contents

Section	Page
1 References	3
2 Foreword	4
3 Minimum requirements for operation within the UK	5
4 Contact details	7
5 Document history	8



## Section 1

# References

- 1.1 EN 300 328 Electromagnetic compatibility and Radio spectrum Matters (ERM); Wideband transmission systems; Data transmission equipment operating in the 2,4 GHz ISM band and using wide band modulation techniques; Harmonized EN covering essential requirements under Article 3.2 of the Radio Equipment Directive (Directive 2014/53/EU)

## Section 2

# Foreword

- 2.1 The Radio Equipment Directive (Directive 2014/53/EU) was implemented in the United Kingdom (UK) by the Radio Equipment Regulations 2017. In accordance with Articles 8 and 7 of Directive 2014/53/EU, this UK Interface Requirement contains the requirements for the use of wideband transmission systems operating in the 2400 – 2483.5 MHz band.
- 2.2 Nothing in this UK Radio Interface Requirement shall preclude the need for equipment to comply with Directive 2014/53/EU.
- 2.3 It is required by the Wireless Telegraphy Act 2006 that no radio equipment is installed or used in the UK except under the authority of a licence granted by or otherwise exempted by regulations made by Ofcom. It is a condition of such a licence or exemption regulations as appropriate that, in order to be installed or used in the UK, the equipment must meet the minimum requirements specified in this UK Interface Requirement for the stated equipment types and for the stated frequency bands. Nothing in this UK Interface Requirement shall preclude equipment from being placed on the market in the UK that complies with the 'essential requirements' specified in Directive 2014/53/EU.
- 2.4 The requirements given in the main body of this UK Radio Interface Requirement will apply to the use of wideband transmission systems operating in the 2400-2483.5 MHz band.
- 2.5 This UK Radio Interface Requirement will be revised as necessary, for example to follow:
  - i) current technology developments for reasons related to the effective and appropriate use of the spectrum in particular maximising spectrum utilisation; and
  - ii) changes to the available spectrum allocated for use of wideband transmission systems operating in the 2400-2483.5 MHz band.
- 2.6 All UK Radio Interface Requirements notified under Directive 2015/1535/EU will be published and will be made available free of charge from the Ofcom web-site at <http://www.ofcom.org.uk>.
- 2.7 Further information on this UK Radio Interface Requirement can be obtained from the technical enquiry contact given at the back of this document.

## Section 3

# Minimum requirements for operation within the UK

- 3.1 The minimum requirements in this document are made for reasons related to the effective and appropriate use of the radio spectrum, in particular maximising spectrum utilisation.
- 3.2 This UK Radio Interface Requirement gives a high level description of how the spectrum in the UK is used for wideband transmission systems operating in the 2400-2483.5 MHz band. It does not prescribe technical interpretation of the 'essential requirements' of Directive 2014/53/EU.
- 3.3 This UK Radio Interface Requirement therefore stipulates the necessary equipment parameters for the use of wideband transmission systems operating in the 2400-2483.5 MHz band. Table 3.1 contains the relevant equipment parameters. These taken together with the 'essential requirements' detailed in Article 3.2 of Directive 2014/53/EU constitute the minimum requirements for use of wideband transmission systems operating in the 2400-2483.5 MHz band within the UK. Nothing in this UK Interface Requirement shall preclude equipment from being placed on the market in the UK that complies with the 'essential requirements' specified in Directive 2014/53/EU.
- 3.4 The technical parameters specified in the UK Radio Interface Requirement are applied to achieve the desired level of compatibility within wideband transmission systems operating in the 2400-2483.5 MHz band with other radiocommunications services, whilst promoting enterprise, innovation and competition.
- 3.5 This UK Radio Interface requirement provides the necessary technical information which facilitates access to spectrum allocated to wideband transmission systems operating in the 2400-2483.5 MHz spectrum in the UK. It is not the intention of this UK Radio Interface Requirement to duplicate or impose any additional 'essential requirements' of the Directive 2014/53/EU on products. Any specified parameters within this document are for the purpose of identifying product options and not as a national de facto product requirement.

**Table 3.1: Minimum requirements for the use of: - Wideband Transmission Systems operating in the 2400 - 2483.5 MHz band**

Mandatory (1-9)		
1	<b>Frequency band</b>	2400 MHz to 2483.5 MHz
2	<b>Radio service</b>	N/A
3	<b>Application</b>	Wideband Data including RLAN
4	<b>Channelling modulation</b>	N/A
5	<b>Maximum transmit power limit</b>	a) -10 dBW (100 mW) EIRP b) PSD for frequency hopping -10 dBW (100mW) EIRP per 100kHz c) PSD for other forms of modulation -20 dBW (10mW) EIRP per 1 MHz
6	<b>Channel occupation rules</b>	N/A
7	<b>Duplex type/separation</b>	N/A
8	<b>Licensing Regime</b>	Licence-exempt
9	<b>Additional essential requirements</b>	N/A
Informative (10-13)		
10	<b>Frequency planning assumptions</b>	N/A
11	<b>Reference</b>	EN 300 328
12	<b>Remarks</b>	
13	<b>EU Notification Number</b>	2006/420/UK



## Section 4

# Contact details

**Ofcom Spectrum Licensing, PO Box 1285 Warrington, WA1 9GL**

- Tel: 020 7981 3131
- Fax: 020 7981 3235
- Email: [spectrum.licensing@ofcom.org.uk](mailto:spectrum.licensing@ofcom.org.uk)
- Website: <http://www.ofcom.org.uk>

## Section 5

# Document history

Version	Date	Changes
1.0	15 12 2000	First Publication
2.0	04 08 2006	Modulation / bit-rate restrictions removed
3.0	15 11 2006	Removed “draft” changed service from “Mobile” to “N/A” and changed application to “Wideband Data including RLAN”
4.0	January 2018	Replaced R&TTE Directive 1999/5/EC and Directive 98/34/EC with Radio Equipment Directive 2014/53/EU and Directive (EU) 2015/1535 respectively. Minor editorials

